

ANNA UNIVERSITY OF TECHNOLOGY, COIMBATORE  
B.E. / B.TECH. DEGREE EXAMINATIONS : NOV / DEC 2011  
REGULATIONS : 2008  
FOURTH SEMESTER  
080120019 - ELECTRONICS AND MICROPROCESSORS  
(COMMON TO AUTOMOBILE / MECHANICAL ENGG.)

Time : 3 Hours

Max. Marks : 100

PART - A

(10 x 2 = 20 MARKS)

ANSWER ALL QUESTIONS

1. Differentiate the conductor, Insulator and Semi conductor.
2. Draw the characteristic curve for Zener diode.
3. How the CB configuration is differing from the CE configuration?
4. What is negative feedback amplifier?
5. Mention the application of the flip-flop.
6. What is the requirement of A/D conversion?
7. Why is the data bus bidirectional?
8. What are the different addressing modes in 8085?
9. Mention the different flags in 8085.
10. What is ALE in 8085?

PART - B

(5 x 16 = 80 MARKS)

ANSWER ALL QUESTIONS

11. (a). Explain the principle and operation of the Zener Diode with necessary diagram.

(OR)

- (b). Explain the principle and operation of the Full wave rectifier with necessary diagram.

12. (a). Explain with a neat sketch the characteristics of Common Collector configuration.

(OR)

- (b). Explain about the working principle and characteristics of UJT with neat diagram.

13. (a). Explain about the universal logic gates with logic diagram and also implement the Exclusive OR gate operation with basic gate.

(OR)

- (b). Explain about any two type of A/D conversion with neat diagram.

14. (a). With neat diagram explain the operation of microcomputer.

(OR)

- (b). Describe the Direct addressing mode and In-Direct addressing mode with necessary diagram.

15. (a). Write short notes on the following :
- (i) Serial communication with the microprocessors. (8)
  - (ii) Interfacing of output devices. (8)

(OR)

- (b). Implement the Temperature control using 8085.

\*\*\*\*\*THE END\*\*\*\*\*